AMERICAN MEDICAL TIMES

Being a Weekly Series of the New York Journal of Medicine.

No. XIV. } New Series. NEW YORK: SATURDAY, APRIL 2, 1864. { *Mail Subscribers, $3 per Ann.*
Vol. VIII. } *City and Canadian, 3 50 "*
Single Numbers, 10 cents.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE IV.—PART II.

It is desirable, if possible, to prevent the admission of air in all cases in which we operate for hydrothorax.

Military surgeons do not all assent to this doctrine. Some have observed that air does not directly influence serous surfaces, and they can see no harm in allowing it free ingress; but air certainly promotes decomposition of blood, pus, and probably of serum also, and converts them from bland, unirritating fluids into ichorous and scalding discharges. When blood, serum, or pus is present, therefore, it would be fortunate if the air could be excluded. We have seen that this cannot be done when we operate for hæmothorax, since a small opening would be insufficient to evacuate those large clots of blood. In traumatic hydrothorax, however, the fluid may in general be evacuated by a trocar and canula, and with judicious management the admission of air can, in many cases at least, be prevented.

There is another reason why we would avoid the admission of air after this operation. We resort to tapping in hydrothorax not alone for the purpose of relieving the dyspnœa, nor, indeed, mainly for this purpose; but in order that we may, by a timely removal of the pressure upon the lung, prevent the formation of those adhesions which will very soon bind it against the posterior wall of the thoracic cavity, and impair, if it does not destroy, its function for ever. In short, we remove the fluid in order that the lung may resume at once its normal position, and in the hope that by contracting adhesions over the whole of its peripheral surface, we may effectually secure the patient against any similar accumulations hereafter.

Having removed the fluid as completely as possible, and closed the wound hermetically, if you please, the patient should be directed to lie upon the injured side, so that the lung shall be made to fall, if possible, against that side of the chest; by which means adhesions between the pleura-costalis and pleura-pulmonalis will be favored.

Fourth.—The chest must be opened when pus has formed within the cavity of the pleura. The signs of empyema (pyo-thorax would have been a better term) are the common signs which indicate the presence of any fluid in this cavity, occurring in most cases at a later day than in either hæmothorax or hydrothorax, preceded by pleuritis or pleuro-pneumonia, accompanied with rigors, night sweats, and all the usual phenomena of hectic; the intercostal spaces are more frequently obliterated, and the cellular tissue of the dorsal and lumbar regions is sometimes œdematous.

The existence of empyema having been fully ascertained, no time ought to be lost in giving to the pus a thorough evacuation, either at the wound, or, in case this is completely closed, at the most depending point of the thoracic cavity.

What has been said in relation to the admission of air in cases of pneumo-thorax, is equally applicable to the pathological condition we are now considering. Air rapidly decomposes the pus and renders it offensive, acrid, and irritating; and by the admission of air, also, the lung is not permitted to expand upon the removal of the pus; and permanent disability of the lung, with contraction of the thoracic wall, is inevitable.

In idiopathic empyema, employing the term idiopathic in contradistinction to traumatic, and in examples of traumatic empyema, the result of incised or punctured wounds—in none of which cases is there probably any foreign substance, such as pieces of clothing, fragments of bone or of bullets, within the cavity of the chest to perpetuate the discharge—it is of the highest importance to exclude the air. This is not always practicable, since the opening, however carefully made, is exceedingly prone to become fistulous, and not unfrequently the flakes of lymph so block up the channel that nothing but a free opening will answer. There are many surgeons and physicians, also, who do not regard it as a matter of any moment whether the air is admitted or not. These opinions have become especially prevalent of late; and, in proof that it is just as well to admit the air as to exclude it, they who entertain these opinions refer to many examples of recovery after free incisions. It is not, however, entirely a question of life to the patient which we are considering. The essential purpose which the surgeon has in view in excluding the air is to give the lung an opportunity to expand, and thereby to restore its function; and it is probable that this never happens to any great extent when the orifice remains permanently open until the cure is completed.

It is perhaps hardly worth while to discuss this point so important, as we think, in its relations to empyema, as it occurs usually in civil practice, and as it results from punctured wounds in battle, since, in the empyema which results from gunshot wounds, the admission of air, if it has not already preceded the operation, becomes almost inevitable after the operation, from the fact that the formation of matter is so persistent; the orifice made by the operator sooner or later becoming an established and open fistula.

Moreover, in a very large proportion of these cases, there remain some small spiculæ of bone or other foreign substances, whose escape would be favored by allowing the wound to remain open. It will be seen, therefore, that, excluding those examples in which it is found impossible to keep the wound closed, and also those in which it is not desirable to keep it closed, very few cases will remain to which the rule can be properly applied. In short, we shall only attempt to exclude the air after the operation when it is known that there is no foreign substance within the chest, and even then a failure must generally be anticipated.

In order to facilitate the escape of a foreign body which lies loose in the cavity of the thorax, the orifice needs to be large and in a proper situation. If its exact position becomes known, and it cannot be reached otherwise, the surgeon will not, in general, hesitate to make an incision for its removal. The sooner it is removed the better, because its continued presence will perpetuate the discharge, and because every day the intercostal spaces are becoming diminished by the contraction of the side of the thorax, until at length, in some cases, the ribs nearly meet, and a free opening into the chest could then only be made by the removal of a portion of one of them.

When air has once been admitted, in a case of empyema, I fully believe that thereafter the wound should remain open; and the larger the orifice the better it will be for the patient. It is probable that a very small amount of air admitted will insure decomposition of the pus as certainly as a larger amount; and when decomposition has commenced, it is neither possible nor desirable to maintain occlusion.

We shall observe now, gentlemen, that the patient never fails to experience an increased difficulty in respiration, and that most of his other symptoms are aggravated whenever the wound is temporarily closed, and that he is relieved the moment it is opened again.

The process of cure in empyema is slow, tedious, and too often, unfortunately, ends in hectic and death. There are several causes which may operate in causing this delay.

The bullet sometimes perpetuates the suppuration; a piece of cloth is occasionally left in the track through which the bullet has passed; very often small fragments of the ribs, of the sternum, or of the scapula have been carried in. To these causes we may add at first incessant motion of the ribs in the act of respiration, which in some measure prevents adhesion even when the surfaces come in contact; but especially the collapse of the lung, in consequence of

which an enormous cavity is left, upon which the ribs and diaphragm contract only slowly, and a portion of which has to be filled up with granulations and layer after layer of fibrin, the lung itself, in most cases, only expanding again to a very limited extent, and after the lapse of many months, or even years.

It is plain, therefore, that the great object of the surgeon must be to allow the matter free egress, and to sustain the general system. Never for a single day ought the abscess to be closed, lest the confined matter, finding no other way of escape, should penetrate the walls of the thoracic cavity, and make channels for itself in other directions. When once the pus has found a way into the cellular tissue outside of the pleura, no limits can be given to its aggressions, and a speedily fatal issue may fairly be anticipated. In very many of the autopsies we have seen the pus burrowing deeply among the muscles of the back, underneath the peritoneum, and down even into the pelvic cavity.

As to injections, it is probable that when employed solely for the purpose of insuring cleanliness in the abscess, they will always be of some service; and then tepid water, or tepid water slightly medicated with such disinfectants as the chlorines or the bromides, will answer the indications fully. The fluid should be conveyed into the abscess in the most gentle manner; and then, by turning the patient upon the wounded side, it should be poured out again, in the same manner that we would proceed to rinse out a cask through its bung-hole.

Surgeon Middleton Goldsmith, U.S.V., has employed for this purpose a solution of bromine and bromide of potassium with excellent effects, the proportions being the same as used by him in cases of hospital gangrene. I have myself witnessed the advantages of this solution in cleansing the abscess, removing the fœtor, and giving comfort to the patient.

If the orifice cannot otherwise be kept freely open, it should be dilated by the daily introduction of conical gum-elastic tents or sounds, or with tents made of a piece of the bark of the slippery elm tree, which rapidly swells by the absorption of moisture, and which the patient, after a little instruction, will learn to use himself.

The only form of emphysema which deserves special attention in this place is the traumatic variety, and in which the air has been admitted into the areolar tissue underneath the skin.

This phenomenon is quite common after simple fractures of the ribs, when the points of the fragments have penetrated the structure of the lungs; in my recorded notes I find it noticed in 11 cases out of 21; but in gunshot fractures it has happened to me to meet with it much less often. When a rib, being broken, is made to penetrate the structure of the lungs, and at the same time there is no wound upon the surface communicating with the cavity of the pleura, the air admitted into this cavity from the bronchiæ, in the act of inspiration, is driven outwards through the wound in the pleura-costalis during the act of expiration, and now readily passes into the areolar tissue underneath the skin. If, however, the wound in the pleura-costalis communicates freely with the outer surface of the integument, the air escapes externally and no emphysema takes place. Emphysema is produced by the contraction of the thoracic parietes, and not by their expansion; and it follows that the air which causes this phenomena must come directly from the pleural cavity, and this, too, notwithstanding it may have entered the cavity originally through an external wound.

This explanation, as applied to its occurrence in simple fractures unattended with any external wound, is sufficiently simple; but it is not so easily understood how it can happen in compound fractures, where there is an external wound, made perhaps by a bullet, communicating with the cavity of the pleura.

M. Delpech has been elected a member of the Section of Hygiene of the Academy of Medicine.—*British Medical Journal.*

Original Communications.

NITROUS OXIDE, OR "LAUGHING GAS"

AS AN ANÆSTHETIC,

WITH SOME OBSERVATIONS UPON CHLOROFORM AND ETHER FOR THE SAME PURPOSE.

By A. WESTCOTT, M.D., D.D.S.,
of Syracuse, N. Y.

(*Continued from page* 147.)

In whatever light we may view this "great discovery," I have yet to see the smallest advantage, in any particular, it has over either chloroform or ether, and there are some objections to its employment as an anæsthetic agent, which do not pertain to either of the other articles. It is wellknown to almost every school-child that of the air we inhale nearly eight per cent. is retained in the blood, and that a different poisonous article, carbonic acid gas, is returned instead, and that oxygen is absolutely necessary to sustain life. Now in the inhalation of both chloroform and ether a free supply of air is always taken into the lungs in connexion with the vapor of these substances. But how is it with the inhalation of the nitrous oxide? This is breathed from a rubber bag (which is of course air-tight), and thus all the carbonic acid exhaled is returned into the bag to be re-breathed. The gas must therefore necessarily soon be so contaminated as to become actually poisonous. Not only so, it is true that from the first, oxygen is positively excluded—for, as I have already demonstrated, oxygen, to be available for supporting life, must be free; that any amount of it in chemical combination with other substances is not of the least account.

It therefore follows that in addition to every objection which can be urged against the use of chloroform or ether, these two must be superadded to nitrous oxide, viz. the patient is compelled to breathe more or less carbonic acid gas after the very first exhalation, and moreover an atmosphere totally deprived of the life-supporting principle—oxygen.

At best, no one could live longer, if confined to this gas, than he could sustain life without oxygen, and this, as all know, would be but a few moments. Is it not evident that such a gas, breathed in such a way, must always be more or less hurtful and *dangerous*, unless used by the most skilful and discriminating physician. This danger consists, not so much in the intrinsic qualities of this gas as the difficulty of ascertaining that state of the system in each individual case which contra-indicates, or indeed would be wholly incompatible with its administration. A few weeks ago, a soldier died suddenly in this city, who had just previously been examined by a medical board and pronounced sound and "able-bodied." So sudden and mysterious was his death, that the woman with whom he was at the time boarding was arrested and imprisoned for his murder. But a post-mortem examination, however, released this woman from prison and relieved the public of all doubt as to the cause of his death. "One lung was found to be entirely destroyed by disease, and the other was nearly consumed!" Now if such mistakes as these are liable to be committed by a board of medical men, intrusted with the responsible duty of selecting fit and able-bodied men for our army, what will be the chances for similar mistakes by such men as are urging this gas upon the community as "perfectly harmless"—not one in ten of whom is medically educated or in any way qualified to make such an examination?

Formerly, for a period of eight years, I was engaged in practical chemistry, and during that time I administered nitrous oxide gas as a scientific experiment not less than two hundred times, and in no case did I ever see a person under its influence in a fit state to have a tooth extracted or any other surgical operation performed. During this period, to say nothing of many cases which were of the

most ludicrous and frequently disgusting character, several of an alarming nature came under my observation, which did much to leave on my mind a lasting prejudice against its employment for *any* purpose. One of these cases was that of a young man of about twenty years of age, apparently in full health, who in all respects seemed to be as good a subject as could be presented for a full dose. He had breathed it but a short time before he became entirely insensible and apparently lifeless, and it was several hours before he could be fully restored to consciousness, and several weeks before he fully recovered from its effects.

Prof. Amos Eaton, the founder of the Rensselaer Institute, and a man not only of profound science but of great experience, uniformly in his lectures upon this subject gave the strictest caution relative to its use, and related many instances of its deleterious effects even when prepared and administered by the most skilful and judicious hands, and when carried only to the extent of exhilaration.

In a letter just received from an intelligent dentist of a neighboring city, three cases of its bad effects are related, all occurring within the last two weeks. "In one of the cases the patient is still in such a state as to render his recovery doubtful."

The late fatal case of Samuel P. Sears, of N. Y. city, who died within two hours after inhaling this gas, is generally known to the public, and has excited much comment both in public and scientific journals.

A Mr. Colton, of 22 Bond street, N. Y., in reply to a local article of mine, published in one of our daily papers, says:—"The death of Mr. Sears only very slightly affects the use of the gas as an anæsthetic agent in this city, where all the facts are known." "The facts are, that *he recovered from the effects of the gas* (these effects never last more than two minutes), and did not die till two hours afterwards. The verdict of the Coroner's Jury was that *he died from congestion of the lungs*, and the post-mortem examination showed that one lung was entirely gone from consumption, and the other nearly so; that he was liable to die at any moment—an hour before, as an hour after inhaling the gas. *No blame was attached to the dentist. The Medical and Surgical Reporter*, in referring to this very case, says: 'In view of the pathological condition of the lungs of the patient, we have little doubt that the same result would have followed the extraction of the tooth if no anæsthetic had been taken. When a person has so slight a hold on life as this man had, so insignificant a circumstance as the extraction of a tooth might sufficiently derange the nervous and circulatory systems as to induce the congestion that caused the death.'"

Now, are these statements, taken in connexion, calculated to give a correct impression to the general reader, circulated as they were in a public newspaper? Did or did not Mr. Sears die from the *effects* of this gas? and should, or should not, "blame" be "attached" to the dentist administering it? Both of these inquiries are answered in the negative by Mr. Colton: "*That he recovered from the effects of the gas*, and did not die till *two hours* afterwards." He of course recovered from its exhilarating and perhaps from its anæsthetic effects, but this matters very little so long as the *fatal* "effect was induced by its administration."

But let us see how far the Coroner's report, of which the following is a *true* copy, goes to justify either of these positions:—"The Jury rendered a verdict of death from congestion of the lungs, *induced by the administration of nitrous oxide gas for the purpose of extracting teeth. We would exonerate the party administering it from all criminal intent, but think there should be an examination made by competent persons in all cases where it is contemplated to use this gas.*"

The jury thus distinctly say that the congestion of which he died was "*induced* by the administration of the nitrous oxide gas for the purpose of extracting teeth." The fact that he lived two hours, and did not die immediately from suffocation or asphyxia, does not even modify the assertion that the inhalation was the cause of his death. The proximity of the cause and effect, in his case, is too great to regard the former even as a remote cause.

As to whether "no blame was attached to the dentist" by the jury, the report speaks for itself. They say, "We would exonerate the party administering it *from all criminal intent*," but very judiciously add, that "there should be an examination made *by competent persons in all cases* where it is contemplated to use this gas." But we are not informed whether in this case *any* examination was instituted to learn the condition of the patient, nor could it have been necessary. Would not the *countenance* of a person having so very "slight a hold on life," have clearly indicated the fact to any one of common sense and common observation. But whether there was or was not an examination, nothing is more clear than that this was not a proper case for the administration of the "*laughing* gas."

In regard to the relative merits of the anæsthetics now in use, either as to their efficiency, safety, or convenience, there can be very little doubt that, while chloroform is quite as safe as ether, and vastly more so than nitrous oxide, its promptness in producing anæsthesia and its pleasantness will always give it a pre-eminence as an anæsthetic agent. I have not had as much experience with ether as with chloroform, and yet I have had enough to lead me to give a decided preference, all things considered, to the latter. I have used chloroform pretty freely for at least fifteen years in my dental practice, and I can say that I have yet to see even the first *alarming*, much less fatal, case. In a note which I received a few days ago from Dr. A. B. Shipman, of this city, upon this subject, he says:—"I have used chloroform within the last fifteen years not less than five thousand times in my private practice, both for medical and surgical purposes, and probably more than two thousand times in the U.S. Army, and in no instance have I seen a fatal case, nor even one which was attended with any alarming symptoms." But notwithstanding this and a host of other similar testimony, together with my own favorable experience with chloroform, I have to confess that I never give chloroform (nor ether) without some apprehension, and in *no* case do I ever administer it without a careful examination into the health and physical condition of the patient, and always feel relieved when the effect has passed off and the patient is fully restored to consciousness.

Both chloroform and ether possess one property which is sometimes, to say the least, exceedingly annoying. I allude to their effect upon the stomach of some persons, which gives rise to vomiting—in some instances quite protracted. I have resorted to several expedients to overcome this difficulty, but rely mainly on having the patient's stomach as nearly empty as possible. It should in no case be given in less than four or five hours, especially after eating a hearty meal, and I think a fasting of eight hours far better in any case. When this tendency (to vomit) is known, I have the patient breathe the chloroform very slowly—taking from ten to fifteen minutes to get him completely under its influence. I have in several cases tried camphor (which chloroform readily dissolves), in combination with chloroform, but I can only say in regard to the result of this experiment, that I have had no case of vomiting when thus using it, though I cannot say that either of the patients would have vomited under the use of chloroform in its pure state.

As this experiment is doubtless a harmless one, I hope those who are constantly using chloroform will more fully test its value. In regard to the manner of administering it, the great point is to give the patient an opportunity to have *a free supply of air* in connexion with its vapor. Next to this, *have the mind of the patient calm*, and, if possible, free from apprehension. I have frequently known dentists and physicians to say to their patients: "I will give you chloroform, but you must take it at your own risk." No surer course could be taken on the part of the operator to defeat his object. I never knew chloroform to

act satisfactorily while the mind of the patient was thus surcharged with fear. I would say to all wishing to use chloroform this—first make up your own mind whether you will or will not give it. If you decide to administer it, never express any fear or doubt as to a good result to your patient; confine all that sort of talk, or even look, to friends, if doubt should be expressed. An eminent surgeon once remarked to me, that it was his experience that nearly twice as much chloroform was often required to extract a tooth as to amputate a limb. The reason is simply this:—Dentists, hoping to avoid administering it by frightening the patient, are obliged to give the first half to get the patient where he ought to have been on the start. I have found the recumbent, or partially recumbent position, the most favorable, and generally have my patient as nearly so as is practicable. Lastly, everything about the apartment should be perfectly quiet. There should be no more persons present than may be needed as assistants, and nothing said or done to draw the attention of the patient. I hardly need add that while the operator should have everything provided for in the way of instruments, etc., this preparation should not be made in the presence of the patient. This is easily done by seating your patient in another room till all is arranged, and your "battery masked." By strict observance of these rules you will be enabled to use the least possible amount of chloroform to produce the desired effect, and I think may have very little apprehension of unfavorable results. I cannot close this article without expressing the wish that every *intelligent* (pardon me for *this* adjective) physician and dentist would take some pains to enlighten the *public* mind in regard to this subject of anæsthetics, and point out clearly their use and abuse, and thus rescue this practice from its control by empirics.

Syracuse, N. Y., Feb. 18, 1864.

AN ABSTRACT OF A COMMUNICATION

RELATING TO THE SUCCESSFUL TREATMENT OF MEMBRANOUS CROUP BY THE HOT VAPOR BATH METHOD.

Read before the N. Y. County Medical Society.

By M. MORRIS, M.D.,

OF NEW YORK.

At 11 o'clock on Sunday morning, February 26, 1860, I was called to see a boy two years and one month old, who had been suffering from a severe cold for several days. I found the child presenting the ordinary signs of incipient membranous croup. An emetic, hot water bath, and an expectorant mixture were ordered. After the administration of these, there was an apparent abatement of the symptoms; thereupon a mercurial purge was administered. As night approached, however, the symptoms again became aggravated, and there was again repeated the emetic, hot water bath, and the topical application of a strong solution of nitrate of silver to the throat, which again produced partial relief to the patient. During the night steam from boiling water was frequently inhaled to the relief of the urgent dyspnœa, but no permanent abatement in the progress of the disease ensued.

On the morning of the 27th, the dyspnœa had become suffocative, and the patient's strength was rapidly failing. Dr. Geo. A. Peters was called in consultation. It was agreed that the case was clearly membranous croup, and the operation of tracheotomy was decided against. The topical application to the throat was changed to tr. iodine, various emetics were given, and the inhalation of steam persisted in without relief to the patient, who gradually became worse.

About midday some relatives of the family, without my knowledge, called in Drs. Sayre and Church, who, recognising the imminence of the case, advised and urged the immediate operation of tracheotomy. I opposed this measure, and being sustained by the parents, I suggested as a dernier ressort, the more efficient use of hot vapor, in a general mode, by filling, at a high temperature, the atmosphere with a dense cloud. This was acceded to by both gentlemen, who suggested several plans to accomplish this. Having tried these without avail, I finally adopted the following, which was to place a number of large tin pans in different parts of the room containing boiling water, and in these to immerse heated bricks and sad-irons, until the room became thickly clouded with steam; also the temperature of the room was raised to one hundred degrees as an average. Soon after fully establishing this condition of the atmosphere of the room, although the process was exceedingly oppressive and exhausting to the attendants, the patient began to exhibit signs of relief. This treatment was continued during the night without relaxation, with evident benefit to the patient, so that on the morning of the 28th the dyspnœa was diminished and the breathing had assumed a less stridulous character, the cough was less harsh, and the expectoration had become profuse, the sputa being copious, and of an opaque, gelatiniform character. The pulse had improved in strength, and was about 110 in frequency. The skin was bathed in perspiration, and the pink color had returned to the lips. The vaporizing treatment was continued as efficiently as before. The throat was occasionally sponged with dilute tr. iodine, and the patient was given milk punch or wine whey and beef tea, which had been given the day before, but had not been taken by the patient to any extent, until some relief from the urgent dyspnœa had followed from the hot vapor treatment, when he commenced to take nourishment freely.

This plan of vaporizing was continued without intermission until the 30th, a period of seventy-two hours, when the patient became entirely relieved. Dyspnœa and all hoarseness and stridulous cough had subsided. He had partaken freely of nourishment and stimulants, which restored his strength rapidly. The vapor and temperature were now gradually lessened for the two succeeding days, until the atmosphere of the room had assumed only a moist condition at 80 degrees. From this time the patient continued to convalesce with judicious precautions, and survives to this day.

I remained constantly with this patient during the seventy-two hours of the vaporizing treatment, and I was thus enabled to determine the maximum and minimum degrees of heat and vapor, which were necessary to afford constant and permanent relief. These were from 90 to 110 degrees of Fahrenheit. Below 90 degrees the dyspnœa and stridulous inspiration would increase, above 110 degrees the pulse would indicate exhaustion. And this heated atmosphere required to be charged with steam to the extent of a dense cloud continually.

This general application of steam in an atmosphere of high temperature for the treatment of membranous croup, was suggested to me by the investigations and treatment of œdema glottidis, during the years 1848 and '49, by my former preceptor Dr. Gurdon Buck, who advocated and used inhalations of steam as one of the means of treatment in this diease.

On the 18th of February, 1864, I was called to attend a girl seven years old, who had been suffering with catarrh and croupy symptoms for two days. The mother had given emetics and used some domestic remedies, but the child rapidly grew worse. I was summoned at 5 P.M. The patient was evidently suffering with incipient croup. The tonsils were greatly swollen and inflamed, and abundant mucous secretions blocked up the fauces. A stimulating expectorant mixture was ordered, and instructions given to generate steam in the room to as great an extent as possible. At 9 P.M. dyspnœa had increased; breathing more stridulous. Ordered an occasional emetic of ipecac. Vaporizing had not been done efficiently, consequently gave more explicit instructions to continue the treatment. On the 19th, however, the patient was much worse. The disease had increased. The dyspnœa had become urgent, cough was croupy; there was loss of voice; her strength was fast failing. The steaming process had not been main-

tained efficiently during the night, consequently no benefit had resulted from it. Considering that if the operation of tracheotomy would avail in this case, no time should be lost, I called in consultation, at 3 P.M., Drs. J. K. Merritt and Geo. A. Peters. It was decided not to operate—as there appeared to be a diphtheritic element in the case. Prognosis considered to be decidedly unfavorable. The treatment, however, was ordered to be as follows: two and a half grains each of chlorat. potass. and muriat. ammon. to be given every two hours; five grains sulph. cupri whenever the paroxysms of dyspnœa are suffocative. Milk punch and beef tea ad libitum, and the vaporizing process to be thoroughly instituted and maintained. At the suggestion of Dr. Merritt, a corner of the room was inclosed by means of a thick quilt suspended from the ceiling; within this was a gas bracket, to which was connected a gas stove; upon this was placed a large tin boiler partly filled with hot water. The patient was taken within this inclosure and held in the arms of an attendant, she being less oppressed for breath in such position.

It was soon found that the gas apparatus did not generate sufficient steam or heat; consequently heated bricks and sad-irons were frequently immersed, and the fire in the room increased so as to raise the temperature in the inclosure to 100 degrees mean, and to keep the atmosphere charged with a continuous dense cloud of steam. This vaporizing procedure was fairly established at five P.M.; Dr. Merritt and myself visited the patient at eleven P.M. together. The disease was evidently held in check; dyspnœa slightly diminished; inspiration not so stridulous; cough less ringing and harsh; expectoration more free, and the sputa consist of a tough viscid mucus. As the breathing becomes less labored, she is more inclined to take nourishment and stimulants. Her strength no longer fails; pulse, although very frequent, is yet somewhat fuller. On the 20th, after fourteen hours' steaming process, there is a positive amelioration of the disease. Dyspnœa not so urgent; expectoration quite free. Voice returning; inspiration less stridulous; cough loose and humid; general condition improved. Two P.M., twenty-one hours' steaming; patient steadily improving. Her mother states that two hours previously she coughed up a tough piece, about an inch in length, which was curved transversely, and was quite different from the rest of the sputa, quantities of which she is now expectorating, which is of an opaque, gelatinized character. Six P.M., twenty-five hours' steaming. There is a slight exacerbation of the symptoms. The vaporizing process, which has not been quite so effective during the day, is now actively instituted again, and ordered to be persisted with during the night. 21st—Thirty-nine hours' steaming. The exacerbation subsided at three o'clock this morning; from this date the disease gradually diminished, the patient gained strength and appetite; so that on the morning of the 22d, sixty-three hours' steaming, she was disposed to have her toys to play with, being still in the vapor bath, at somewhat less than previous efficiency; at this time she was coughing up freely tough, opaque pieces, which seemed to be broken down false membrane involved in semi-gelatinized mucus. 23d—The patient is so rapidly convalescing, that at the end of about seventy-three hours' steaming she is no longer confined in the inclosure, but allowed to be in the room at 80 degrees, with a moist atmosphere. Some three days after the last note, the patient was suffering from a slight attack of pneumonia consequent upon undue exposure and want of care; from this, however, she soon recovered, and has since appeared perfectly well.

In a general summary of these two cases of membranous croup, successfully treated by the general application of a steam bath at a high temperature, there are some points novel, and worthy the consideration of the profession. The diagnosis was beyond a question cynanche trachealis, attended with the formation of false membrane. The operation of tracheotomy afforded but little hope of ultimate recovery. The hot vapor in both instances afforded entire relief from impending suffocation. By its continued thorough use, the membrane was evidently arrested in its formation, partially dissolved, and finally detached from its attachments and ejected. There are three prominent points in the treatment which I desire to vividly impress upon all, viz:—

1st. The hot vapor must pervade the atmosphere breathed by the patient to the point of a dense cloud.

2d. The thermometer must be closely watched, and the temperature kept between 90° and 110° of Fahrenheit.

3d. The treatment must be *thoroughly persevered in* until all croupy symptoms have disappeared, which in both instances required about seventy-three hours, after which time some moisture must still be persisted in, or symptoms of bronchial irritation will supervene.

REMARKS ON

AXILLARY AND SUBCLAVIAN LIGATIONS,

WITH CASES,

By OTIS M. HUMPHREY, M.D.,

SURGEON, U.S.V.

Not remembering the statistical results of the recorded instances of ligation of the axillary and subclavian arteries, and without the opportunity for reference at hand, I am unable to state the proportion of successful cases of each of these two operations, or their comparative security from recurrence of hæmorrhage, or the probability of recovery to patients. From the two following cases in my own experience, and from observation, I am inclined to three conclusions:—

First. That both operations are both simpler and safer than they are generally regarded.

Secondly. That, of the two ligations, that of the subclavian affords the greater security from recurrence of hæmorrhage; due not only to the fact of the distance of the practicable point of ligation in its third portion from any branch in its continuity, but due also, seemingly, to the circumstance that its canal of exit between the scaleni muscles is bounded and supported by the first rib and the firm structures of the scaleni, and that the constriction of that canal, resulting from inflammation temporarily set up in the muscles and adjacent tissues by the laceration consequent on the operation, must serve to reduce the calibre of the artery, and of course the force of the circulation, the arterial pulsation, and the strain on the ligated extremity.

Thirdly. That in case of secondary hæmorrhage from the axillary artery, the subclavian should be tied *fearlessly and without delay*, as by any other, or temporizing course, we are almost surely sacrificing our patient, or risking his chances for recovery after a later ligation of the subclavian, by loss of blood in the almost certain recurrence of hæmorrhage. Certain it is that patients presenting no greater discouragements than the following cases, have been allowed to lie and bleed to death by driblets from the axillary artery, with no interference further than compression, styptics, and posture (of what use in the case of so short and large a trunk?) under the impression of inutility and danger of further operative efforts. In the first case following there is good reason to believe that a conservative delay to operate, with the utmost care and vigilance, lost a life.

Case I.—Augustus Reed, private, Co. B, 60th Mass. Vols., æt. 18 years, was struck by a three inch solid shot at the battle of "Deserted House," Va. His right arm was carried away from near the shoulder-joint. It was early in the morning, and very dark, and before he could receive any surgical aid he had lost blood freely. Amputation was performed at the shoulder-joint by Surg. Harlan, 11th Pa. Cav., barely sufficient flap being obtainable—and that injured—to cover the stump. The axillary artery was followed down as deeply as possible, and the ligature applied, as was believed, to an uninjured point on the vessel. After the operation, he rallied well under tonics, stimulants, and

concentrated nourishment, in the regimental hospital in Suffolk, though the flaps sloughed away, leaving a large, bare, transverse stump. Anticipating possible hæmorrhage, a close watch was kept, and the nurses were instructed in that event to make instant subclavian compression. Notwithstanding these precautions, while the patient was sleeping about midnight of Feb. 6th, hæmorrhage occurred profusely, and before compression could be effected, patient lost probably two quarts of blood. The following morning, the compression having been gradually removed, no further loss of blood had been sustained; circulation feeble, but patient pretty bright. D. W. Hand, Surg. U.S.V., Med. Director Peck's Division, and Surg. Harlan, were called in consultation, and it was decided that as there was now no tendency to hæmorrhage, and it could not be positively determined that it was the axillary artery which had opened, the operation of ligating the subclavian should be deferred, in the hope of its non-recurrence, a constant watch being kept on the stump. A week passed with occasional inconsiderable oozing. In the evening of the 13th the vessel again opened. The parts about the shoulder were much swollen, and before compression could be effected there was an additional loss of more than a quart of blood, producing in the patient extreme exhaustion. The following morning the subclavian artery was tied through the subclavian triangle, by the writer, assisted by Surgeons Hand and Harlan. The superficial nervous branches and veins were kept well retracted, and the artery was reached and secured without the loss of a spoonful of blood. Reaction after the anæsthetic was not vigorous, but encouraging. Every sustaining measure was adopted to support the patient. He sustained no further hæmorrhage, and the vessel acquired a secure plug; but the drafts on his vitality had been too heavy, and he died in four weeks from the last operation, of asthenia. A peculiar feature of the case was, that during these weeks, the tegumentary and areolar margins of the wound suffered a constant phagedenic erosion, so that the incision above the clavicle became a broad ellipse.

Case II.—Henry Kilmann, æt. 21, private, 12th Maine Vols., Co. G, suffered compound comminuted fracture of both bones of the left forearm and elbow-joint, with severe laceration of the muscles of the arm, by a railroad accident, near New Orleans, La., Jan. 17th, 1864. Some time elapsed before he was discovered and brought into this hospital, no attempt having been made to check the free hæmorrhage. The writer immediately amputated at the junction of the upper with the middle third of humerus, and as good a flap was selected as the injured tissues would permit. Some half dozen arteries were secured by ligatures, well and deeply applied. The usual dressing and treatment were adopted; condition and prognosis very favorable. Nothing untoward happened till the night of the 23d, when some hæmorrhage occurred from the stump; controlled by elevating it. On the night of the 24th there was slight bleeding; again controlled as before, without repetition, till the night of the 31st, when, while patient was asleep, hæmorrhage occurred copiously and in a full stream, to the extent of three pints or more. A tourniquet was applied above till morning, when the artery was tied in its third portion by the writer, assisted by J. B. G. Baxter, Surgeon U.S.V., in charge, and several of the medical gentlemen attending. The vessel presented a healthy appearance. A degree of prostration followed the hæmorrhage and the anæsthetic, but under a forced sustaining regimen patient improved fairly, till the evening of Feb. 7th, when the axillary artery opened at the point of ligation, and although a trained watch was at hand, it was estimated that two quarts of blood were lost before effectual compression could be made on the subclavian, which, in order to control the open vessel till daylight, had to be continued almost constantly. On the morning of the 8th, assisted by Surg. S. Kneeland, U.S.V., and others, I ligated the subclavian in its third portion, through the subclavian triangle. The vessel lay very deep, and, to make sufficient room, it was necessary to freely incise the trapezius, and tie the superficial veins, which were much enlarged. The vessel was reached, found to appear healthy, and tied with a ligature composed of three threads of ordinary suture silk. After restoration of consciousness, patient was found greatly depressed, with hands and feet cold, and stump very cold and anæmic. Brandy was administered, and hot alcoholic fomentations applied to the extremities, also to the stump, and was continued to the stump till it produced vesicles, for which was then substituted warm dressing of a weak solution of ferri sulph. The best nourishment, with milk, milk punch, beef essence, brandy egg-nog, were urged, and tr. ferri sesquichlor., quiniæ sulph., and ext. nucis vom. continued. The stump was saved from gangrene, but a sinus, which had formed in its posterior aspect previous to the last operation, greatly enlarged, and discharged from the corner of the flaps about a pint daily. Irritative fever set in. ℥j. ol. morrhuæ, ter in die, was added. The fever yielded in a few days, and by Feb. 15th there was no apprehension from pyæmia. By the 29th all the ligatures had sloughed away without the slightest hæmorrhage, and at this writing, March 8th, the man has a good appetite; the wound above the clavicle has nearly healed; the stump is well nourished; the flaps are nearly healed and seem closed; and he can, without exhaustion, sit up three hours at a time. There is no reason to doubt his speedy and perfect recovery of robust health.

Barracks U.S. Gen. Hospital,
New Orleans, La., March, 1864.

Progress of Medical Science.

TREATMENT OF CONSUMPTION.

The *Med. Times and Gazette* for Feb. 6 contains an article by John K. Spender, Surgeon to the Eastern Dispensary, Bath, "On some points in the medicinal treatment of chronic pulmonary consumption." Instead of contenting ourselves with the aphorism, "that the fact of a large number of substances being alleged to cure a disease, is a demonstration of its incurability," our author would have us first lessen our therapeutic ignorance, by ascertaining the exact limits of our knowledge; and then, to make the most of all the certain knowledge we possess. Commencing with the fundamental fact laid down by Hughes Bennett, that "phthisis pulmonalis is a disease of the primary digestion," producing that constitutional state which precedes the development of tubercle, "the excess of acidity in the alimentary canal" more than neutralizing the alkaline secretions of the saliva, and of the pancreatic juice, rendering them incapable of "either transforming the carbonaceous constituents of vegetable food into oil, or of so preparing fatty matters introduced into the system, as will render them easily assimilable," he arrives at the first therapeutic necessity, that *alkalies are, as a rule, beneficial.* Where there is "diseased primary digestion" the blood will be deficient in red corpuscles, from which comes the second therapeutic necessity, the administration of *iron* (Trousseau to the contrary notwithstanding), *and an abundance of meat-food.*

The third therapeutic necessity arises from the emaciation which accompanies the disease, and suggests the employment of that class of food and medicines, of which *cod-liver oil stands at the head.* These are his "three main therapeutic postulates;" all other remedies are regarded as mere auxiliaries. Of the alkalies, we have potash-water, bicarbonate of potash, lime-water, and the aromatic spirits of ammonia. Most of the salts of iron cannot be combined with an alkali without undergoing decomposition, but the potassio-tartrate of iron is free from this objection, and may be prescribed as follows: ℞. Ferri potassio-tart., gr. v.; spts. ammoniæ arom., M. xv.; spts. ætheris chlor., ℥ x.; aquæ puræ, ad ℥i. M. ft. haustus. This may be taken two or

three times a day, and if the patient choose, the appropriate dose of cod liver oil may be taken in combination with the draught, with which it is easily miscible. When diarrhœa exists, the saccharated carbonate of iron, united with the chalk and opium powder, may be substituted for the iron and alkaline draught, and continued until the diarrhœa is relieved, that the "primary digestion" may resume its proper functions. Particular remedies to meet particular exigencies may be employed, subordinate to these three great principles. Night sweats are best relieved by a few grains of oxide of zinc.

OIL OF MALE-FERN IN TAPEWORM.

On this subject, ALEX. FLEMING, M.D., etc., Physician to the Queen's Hospital, Birmingham, thus reports:—

"The usefulness or otherwise of the oil of male-fern in tapeworm, and the best mode of exhibiting the drug, were the special objects of this inquiry. The question was issued on the 22d of November, 1862; and the schedules filled up have been returned to me by several gentlemen.

"Total number of cases 100.

"*Sex.*—Of these 100 cases, 30 were males, and 70 females. The remarkable preponderance of the female sex among the subjects of tapeworm, here shown, and, as I believe, for the first time on numerical data, is full of interest in relation to the cause of the disease, and most deserving of further inquiry. The great majority of the cases embraced in this report are taken from hospital out-patients, among whom the women suffer frequently from dyspepsia, very much more so than do the men; and we can readily understand how the 'measle' will have a higher chance of escaping death in a weak stomach, and subsequently making a home for itself in the bowels. As respects the diet itself, the risk run by men must be greater than that by women; as they eat a larger proportion of animal food, and, in Birmingham especially, of pork. Our returns show that the male-fern, as a remedy, is of equal efficacy in both sexes.

"*Age.*—The age of the patient is not mentioned in 8 of the cases. Of the remaining 92, the average age of all, in round numbers, is 29; of the females, 30; of the males, 28. The returns include cases of all ages except infancy, and prove that the oil of male-fern is an efficient remedy as well in the child as in the adult. A child of 1 year and 11 months is the youngest, and a woman aged 69 the oldest example. The exclusive milk diet of infants, and consequent freedom from the cause of the parasite, explains their immunity from tapeworm.

"*The Duration of the Disease* is not given in 33 cases. Of the remaining 67, it is stated to vary from a few days, as in four cases in Dr. Anderson's schedule, to 36 years, as in the example reported by Mr. Anderton. There are 11 cases whose duration varies from 6 weeks to 10 months; 16 are reported of 1 year's duration; 9 of 2 years; 4 of 5 years; 3 of 7 years; 3 of 10 years; 1 of 12 years; 1 of 14 years; 2 of 20 years; and 1 of 36 years. The returns show that the oil of male-fern has been as efficient as a remedy in cases of long standing as in the more recent.

"*Previous Treatment.*—In 35 of the cases, it is stated that there was no previous treatment. Among the remedies which had been used in the others, kousso was employed twice—once with, and once without success. Turpentine had been given on fifteen occasions—seven times with, and eight times without success. The oil of male-fern had been previously used five times—three times with, and twice without success. In one of those cases where it had failed, it was subsequently given in mixture with milk, in the mode which I have suggested, and with perfect success.

"*Dose, Time, and Mode of Administration. Dose.*—The medicine has been administered in doses of a few minims, of half a drachm, of one drachm, one and a half, and of two drachms. The returns show that one drachm is a sufficient dose; at least, in the great majority of cases. The larger doses more frequently excite sickness, vomiting, and diarrhœa.

"*Time.*—In many of the cases, the oil was given in the morning; in a greater number, at bedtime. The results of the two methods, when compared together, do not show any material difference in success. I prefer to give the drug at bedtime, because the patient should continue to fast for eight or ten hours after taking it; and it is easier to do so during sleep than waking.

"*Mode.*—In 47 of the cases, the oil was given with milk, in the manner which I had myself suggested in the observations which accompanied the schedule. The following is the formula referred to.

"Mix well of oil of male-fern one drachm, and mucilage half an ounce. This draught is mixed with one ounce and a half of sweet milk, and taken at bedtime; the patient having omitted the dinner and evening meal of that day. Taken thus, on an empty stomach, the mixture is carried speedily into the intestines, to feed, and at the same time poison, the hungry parasite which nestles there. Milk is the favorite food of the worm. Next morning a dose of castor-oil may be given. If necessary, this medication may be repeated daily, one, two, and three times, or until the worm is discharged.

"In the remaining cases, the drug was given without milk, in mucilage or some aromatic water. In nearly all the cases comprised in the returns, care was taken to give the remedy on an empty stomach. The two classes of cases, therefore, or those in which the male-fern was given with milk, and those in which milk was not used, admit of fair comparison; and of the higher efficiency of the first of these methods of exhibition the returns are conclusive. So given, the drug acts more quickly, and at the same time more efficiently. The proportion of failures is nearly the same with both methods; but the length of worm discharged, and, so far as we can judge, the thoroughness of the cure, predominate in those cases where milk was used.

"*Physiological Effects.*—Sometimes the medicine operates without pain or nausea; more often, there are sickness, griping pains, and purging. Vomiting is reported in ten of the cases. Dr. Bree observes that under its use, the urine was usually loaded with lithic acid. In one of Dr. Anderson's cases, the menses, which had been absent for several months, returned after the use of the oil. The vomiting and purging were caused frequently by the second dose, after the worm had been discharged; and must be ascribed to the action of the drug itself on the gastro-intestinal mucous membrane—not, as some have thought, to the dying struggles of the poisoned worm, though it may be that these play some part in their causation.

"In five of the 100 cases, the worm was discharged alive. Except that it was expelled with unusual speed, I cannot trace any circumstance to account for the living state of the parasite in these examples. The largest portion of tapeworm which is reported to have been passed is fifteen yards. This was in Dr. Bennett's case. No mention is made of any other species of tapeworm than the tænia solium. Large round worms were discharged in two cases.

"The worm was for the most part expelled after the first dose, but in a few cases not till after a second or third dose. The worm was often passed before any purgative was taken, and separately from the ordinary evacuation. In one instance recorded in Mr. Thompson's schedule, the worm was discharged upwards by vomiting. This was the case of a female aged 40, who had suffered many years from tapeworm. She took one drachm of the oil of male-fern in milk, according to my formula; and in the course of an hour, vomited a very long tapeworm, which was quite dead. None passed by stool. After two days, the draught was repeated; and she passed a large quantity of dead and broken tapeworm. The patient had previously taken various remedies without success. In Dr. Anderson's schedule, the case of a girl aged 18 is narrated, who became very sick after taking two drachms of the oil of male-fern in milk, and vomited a large round worm. She was afterwards purged smartly, and passed a quantity of joints of tapeworm.

"The average time which elapsed between the administration of the oil and the expulsion of the parasite was six hours. It was discharged in half an hour in seven cases, in one hour in nine cases, in two hours in six cases, in three hours in three cases, in five hours in six cases. The longest interval mentioned is twenty-four hours.

"In several of the cases, the worm was passed in a broken and softened state. In these cases a considerable interval had elapsed between the taking of the oil and the expulsion of the worm, the softened condition of which was probably due to a more or less complete digestion of the already poisoned and dead worm.

The head is reported to have been found in three cases (schedule of Mr. Spender); but in one of these its discovery rests only on the authority of the patient. It is generally thought that the rarity with which the head is obtained is due to its not being killed and detached with the body; but it seems improbable that the poison should take more effect on the body than the head of the creature, and which it meets first in its passage downwards from the stomach. According to Dr. Nelson, the food is taken in chiefly by the head. I am more inclined to refer the rare discovery of the head to its solution in the digestive fluids. Thin and delicate, it must be easy of digestion. Moreover, placed higher up in the canal, it is in closer proximity to the more active solvent juices. The thin and translucent neck, though found more often than the head, is also generally absent; and probably for the like reason. I am disposed to refer relapses to the growth of other worms which have escaped the action of the poison, and not to the resprouting of the old head.

"*Duration of the Cure.*—Though relapses often occur, there is reason to believe that the cure is permanent in a large proportion of the cases. The length of time (one year) assigned to this inquiry, and the difficulty of ascertaining the future history, especially of hospital patients, render the returns in reference to this important point unavoidably of less value than we could desire. I may mention in this place, that Mr. Osborn, in a note to his schedule, states that two cases of tapeworm are known to him, both females, of 38 and 17 years of age respectively, where the oil of male-fern was used with success, and where the patients remained, to his knowledge, well for many years. In concluding this report, it is only just to remember, in connexion with our subject, the early labors of Peschier of Geneva, and dating so far back as 1830, but which had been almost overlooked in England until Dr. Christison, in 1853, gave the sanction of his authority to the results of Peschier's trials. The later experiences of Drs. Gull, Jenner, Bennett, Willshire, Ransome, and others, have abundantly confirmed their observations, and, conjoined with the results of the present inquiry, establish beyond doubt the great efficacy of the oil of male-fern in tapeworm, and its superiority to the other known remedies of this disease. Further, our report points very decidedly to the most efficient mode of exhibiting the drug; and the whole inquiry has, as I have reason to know, rendered excellent service to therapeutics by making the virtues of the oil of male-fern more widely known and employed throughout the profession. It remains only for me to offer my best thanks to all the gentlemen who made returns to me for their valuable aid in this inquiry."—*Brit. Med. Journ.*

Deaths in London.—An infant, aged three weeks, was last week poisoned by a lozenge which contained the forty-eighth part of a grain of morphia. A child, aged two years, died from the scratch of a kitten. Nine nonagenarians died in the week.—*Brit. Med. Jour.*

Dr. Stadfeldt gives a valuable memoir on placental remains in the uterus after labor at term and abortion. He agrees with Braun in opinion that such remains may occasionally be developed long after into forms of polypi, giving rise to all the symptoms of polypus.—*Dublin Med. Press.*

American Medical Times.

SATURDAY, APRIL 2, 1864.

SALE OF DISEASED MEATS.

Among the subjects relating to the public health which should interest every citizen, that of the sale of diseased meats is of prime importance, and merits especial attention. We read the weekly reports of the City Inspector and of the police, of the amount of diseased meat which they seize and remove, and though astonished at the enormous aggregate, are accustomed to believe that the whole has been removed from the market. But such is not the case. We should come nearer the truth did we estimate the amount removed as the hundredth, and perhaps thousandth, part which finds its way to the tables of the laboring classes, who are compelled to buy the cheaper class of meats. Since the introduction of railroads, the increase of diseased stock in our markets has been very marked. Not only does easy transportation facilitate the conveyance of diseased animals, which would otherwise be allowed to die in the country, but many healthy animals are so bruised in transit that, when slaughtered, large subcutaneous abscesses are disclosed. Formerly, stock reached the markets of large cities only by the slow process of foot-travelling, but this necessitated the feeding of animals at proper intervals, in order that they might retain their flesh. They thus reached their destination by easy marches, foot-sore perhaps, but never reduced in flesh, nor weak from suppurating sores. In railway transportation the whole system is changed. The stock is crowded into open cars, often hundreds of miles distant, exposed to the weather, unable to lie down, jammed with violence against the sides of the cars by the motion of the train, or the crowding of others; and to add to this cruelty, deprived of food and water until they are slaughtered.

Observation confirms our logical conclusions from such facts that few, very few perfectly healthy animals are now slaughtered in our large cities; but as yet no sufficient inquiry has been made to determine the extent of this evil. In England, where due importance is attached to every cause or measure affecting the public health, the subject of diseased meats has attracted great attention, and a bill has been introduced into Parliament designed to effect the desired reform. From a speech in Parliament, by Mr. Bruce, some instructive facts were developed in regard to the diseases of cattle. He stated that statistical tables show, that, in the six years from 1855 to 1860 inclusive, the average annual mortality among cattle was nearly 5 per cent.; the annual death-rate for sheep is estimated at 4 per cent. In regard to pigs, the estimated loss in Ireland is 10 per cent.; in England and Scotland it is much less. The most fatal of diseases is pleuro-pneumonia, from which at least half of the cattle died. He stated that an enormous mass of diseased meat, in various stages of disease, is annually sold. What the precise quantity is it would of course be difficult to estimate. Professor Gamgee estimated it at one-fifth. There is no conclusive evidence on the subject, although there is ample evidence that the quantities are very large, not only

of meat killed while cattle were diseased, but of cattle which had died without the aid of the butcher. Mr. Bruce took the case where the figures were beyond dispute. The deaths in dairies are most numerous. In Edinburgh Prof. Gamgee gave returns from eighty-eight dairies, for the year ending 1862. Out of 1,839 cows kept, 1,075 were sold diseased, of which 791 were sold to butchers, and 284 to be consumed by pigs. In nine dairies in Dublin, on an average of twenty years, out of 315 cows, 161 were sold diseased.

Professor Gamgee says:—"In London I have seen butchers in private slaughter-houses dress extremely diseased carcasses and 'polish' the meat. This filthy practice consists in killing a good fat ox, at the same time that a number of lean and diseased animals are being killed. Boiling water is at hand, and when the lean animals have been skinned their flesh is rubbed over with fat from the healthy ox, and hot cloths are used to keep the fat warm, and to distribute it over the carcass, that it may acquire an artificial gloss and an appearance of not being totally deprived of fat. In Edinburgh I have seen sickly lambs without a particle of fat upon them dressed up with the fat of healthy sheep, much in the same way. From the private slaughter-houses in London I have known even the diseased organs themselves sent to the sausage-maker. In company with another member of my profession, I have seen a carcass dressed and portions of it prepared for sale as sausage meat, and otherwise, although thoracic disease had gone to such an extent that gallons of fetid fluid were removed from the pleural sacs, and that large abscesses existed in the lungs."

In Edinburgh there were between 100 and 200 diseased cattle sold weekly in the meat market. At a meeting of the Royal Dublin Society, Mr. Ganley, salesmaster, said: "That unless some means were devised to give the farmer some compensation for diseased cattle, it was impossible to prevent him from selling them, or the butcher from killing and selling them. Unless some society were formed to have diseased meat paid for, it would be killed and eaten. There was no use in mincing the matter; every one of the salesmen sold diseased cattle. The farmer could not otherwise pay his rent. The disease is so prevalent that he could not live were he to submit his cattle to destruction."

The deleterious effect of diseased meat upon the public health is established by the concurrent testimony of the best medical observers, as proved by Mr. Bruce. Professor Maclagan, of the University of Edinburgh, stated at a public meeting held at Edinburgh in the 29th of January, 1862, that in his practice, both as a physician and a toxicologist, he had met with instances in which several persons had been attacked simultaneously with irritant symptoms after having in common partaken of meat which, on being examined, was found to contain no poison, nor to be in that state of putrescence which, as is well known, occasionally confers upon animal matters actively poisonous properties.

Dr. Alfred S. Taylor, F.R.S., in a letter of the 12th of January, 1863, said:—"As a general principle, I think diseased meat noxious and unfit for human food. In the course of my practice I have met with several cases of poisoning which appeared to be attributable to diseased or decomposed meat—more frequently the latter. I can at present recall to my recollection only two fatal cases—one from diseased mutton, the sheep having had the staggers, and one from German sausages. Animal food has been frequently sent to me with a view to the detection of poison, the persons sending it having the impression that from the vomiting and purging produced poison must have been mixed with it. No poison has, however, been found to justify this suspicion."

Dr. Letheby stated:—"My opinion of the injurious effects of diseased meat on the health of those who make use of it is very decided. I have seen so much mischief from it that I do not hesitate for one moment to say that some legislative measure is most pressingly wanted to prevent, not only the traffic in diseased meat, but also to prevent the slaughtering of diseased animals. Such regulations are now in operation everywhere on the Continent, and they are much needed here. In the city markets alone my officers seize from one to two tons of diseased meat every week. Last year we seized 110,046lbs. of meat, of which 78,697lbs. were diseased, and 13,944lbs. from animals that had died. We often pursue the offenders into a court of justice, and have them fined or imprisoned; but I feel that the mischief should be stopped before it reaches the markets. Officers are wanted to examine the cattle before they are slaughtered. As to the effects of such meat on the human subject, I have seen many cases of illness from it. One of these is sufficiently important to bring under your notice. In the month of November, 1860, a part of a diseased cow was bought in Newgate market. It came from one of the cow-houses in London. It was bought by a sausage-maker of Kingsland, and, as is commonly the case with very bad meat, it was made up into sausages. Sixty-six persons partook of the sausages, and sixty-four of them were made very ill. They were purged, became sick, giddy, and the vital powers were seriously prostrated, and they lay in many cases for hours in a case of collapse, like people with cholera. One man died, and I was requested by the coroner to inquire into the matter. I obtained some of the sausages, thinking that a mineral poison might be present, but I could discover none; and the whole history of the case showed that it was diseased meat which had done the work. Again, Dr. Livingstone tells us that whenever the natives of Africa eat the flesh of an animal that has died from pleuro-pneumonia, no matter how the flesh is cooked, they suffer from carbuncle. Now, it is a very remarkable fact that boils and carbuncles have been most prevalent in this country for several years past. The Registrar-General for Scotland has drawn attention to this fact."

And Professor Gamgee said:—"My own observations confirm the opinions of the eminent authorities just quoted. I have known in many instances where meat supplied to students in lodging-houses in this city has led to vomiting, purging, and severe colic. In the majority of instances such meat was cooked in the form of beefsteak. Three of my own students were affected simultaneously one day in December last. Within a couple of hours after dinner they experienced colicky pains, purging, vomiting, and these symptoms lasted several hours. Bread, potatoes, and water were the only other materials they had partaken of at dinner. On another occasion two were affected, but did not attribute the injury to the steak until the next day, when the servant ate what had been left of the meat, and suffered severely."

Such startling facts should awaken the attention of every community that has to depend upon a general market for its meats. In this city we believe the evil, if known, would be truly alarming. But without any organized plan to prevent the sale of improper foods, the market-men have it their own way, and even go so far as to retail such articles on the street. "Meat for boarders" was for a long time the suggestive "sign" overhanging a large meat stall in the neighborhood of the sailors' boarding-houses. In plain words it would have read: "Diseased meat sold cheaply.' We cannot, however, anticipate any radical reform until a change in our health organizations is effected. We must have an enlightened Health Board with its skilled medical officers, before this crime against the health of the laboring classes can be adequately punished.

MEDICAL EDUCATION IN GERMANY.

From an abstract of a report recently made to the French Minister of Public Instruction, by Dr. Jaccond, who was sent to study the organization of the Faculties of Medicine in Germany, and published in the *British Medical Journal*, we gather the following facts. There are twenty-five German Universities, each of which consists of four faculties: theology, law, medicine, and philosophy. In each faculty of medicine the instructors consist of three kinds of masters: ordinary professors, extraordinary professors, and private masters. The number of ordinary professors in first class faculties varies from twelve to fourteen; they are nominated to the crown by the ordinary professors themselves; they hold office for life, but at the end of thirty years are entitled to a pension; which usually equals the professional salary. They never give less than five hours of lectures per week; the clinical professors have at least ten hours of lecturing, sometimes fifteen or eighteen hours; Virchow has seventeen hours. The funds for payment of the professors are derived from fixed emoluments paid by the State or by the University, if it be rich enough; from fees paid by the students; and from fees paid for lectures. The extraordinary professors are nominated by the Minister on the proposal of the faculty, and their nomination is for life. They have for the most part no fixed salary, but receive fees. These professors lecture on special subjects, though there are no chairs for specialties, except that of ophthalmology at Vienna. In regard to specialties the writer remarks:—

"Specialties, from a professional point of view, may be reasonable enough; but, from a scientific point of view, no Faculty should admit them. There is a chair of medicine and of surgery, and it is the business of the teachers thereof to satisfy all the eventualities of their programme. No special instruction is admitted into the classical and traditional circle of *ordinary instruction*. But then, on the other hand, the branches called special are largely represented in the instruction of the *extraordinary professors* and private masters."

In addition to these professors, ordinary and extraordinary, there are private teachers employed in medical instruction under the faculty; these appointments are made by the faculty after special examination; they receive fees, and are obliged to give courses of lectures, choosing any subject which belongs to the particular branch of study to which they are appointed.

CRUEL TREATMENT OF UNION PRISONERS.

The release of a large number of Union soldiers from the loathsome prison-house of Richmond, confirms all the horrible tales of suffering and privation which have, from time to time, reached the North. Many of these persons were so exhausted by starvation, exposure, and the diseases consequent upon ill treatment, that they have died upon the way. The only relief which they experienced was from the supplies sent by our own Government and the Sanitary Commission, much of which was confiscated by the rebels. Gen. Neal Dow, of Me., who has just been released from a long confinement in Libby Prison, says:—"The rations supplied by the Rebels to the Union officers at Richmond are unfit for human food, and incapable of sustaining life in a healthy condition. They consist only of a small quantity of bread made of corn meal, unsifted and manufactured in the worst manner, and about half a gill of rice two or three times a week. Occasionally, a single medium-sized potatoe or three or four small ones are given to each man, and three or four times, a small turnip has been given to each. And this is all. The rations furnished to the privates consisted *entirely of corn bread of miserable quality* and insufficient quantity, which produces derangement in the digestive organs and death. The soldiers are slowly wasting away, and die of sheer starvation and cold. Two of them, sent off from Richmond at the same time with myself, died of exhaustion before reaching Annapolis. These poor creatures were reduced to such a state of extreme suffering that many of them were demented. They could not tell the name of their Colonel or the number of their regiment. One of them had become perfectly idiotic from long-protracted suffering, many of them having slept all winter in the open air, with no shelter, and without overcoats or blankets. . . . Passing around the camp at Belle Isle, I saw the wretched condition of our soldiers as to clothing and quarters. Nearly one half of them were without shelter of any kind, and all were in extreme want of clothing. As I passed around the camp they cried to me to send them food. Shelterless and almost naked, as many of them were, their first want was food—their chief suffering was from hunger. . . . I went into the hospital, consisting of tents without any floor, the sick lying upon the ground without blankets, without pillows, some of them with sticks of wood for pillows."

A NEW FEVER NEST.

We have noticed the death of five of the ten resident physicians of Bellevue Hospital who contracted the fever, and now have to record the fact that three more are prostrated by this disease. The Medical Board of that hospital have taken the alarm, and urged the Commissioners to erect a Fever Hospital upon one of the islands under their charge. The Commissioners have moved in the matter, but, with characteristic disregard of their medical advisers, have erected a barrack in one of the least ventilated and most public corners of the grounds at Bellevue. In every respect this structure is one of the most perfect "fever nests" that ever was devised. No bird ever selected her nest with more care than the Commissioners this nice and snug corner for the incubation of fever. We trust the Medical Board of that hospital will insist upon the removal of this unsightly building, and the erection of a proper hospital on one of the islands for the reception and treatment of fever. They have it in their power, we believe, to persuade the Commissioners to establish a suitable Fever Hospital. The profession will hold them responsible for the misdirection of effort to secure the proper isolation of typhus.

DR. JOSEPH R. SMITH, U.S.A.

Our attention has been called to a paragraph which found its way inadvertently into our columns from an English periodical, reflecting in coarse and vulgar language upon Dr. Joseph R. Smith, formerly of the Surgeon-General's office. The statements, we have reason to believe, were falsely and maliciously made, with the design of injuring a most worthy officer. Dr. Smith has occupied a position in the Medical Staff too favorable to be affected by such a gross attack. As stated by our Correspondent, he was loyal to the Department, and if he fell into errors it was rather due to his zeal for the welfare of its Chief.

RECENT INVENTIONS.

Mattson's Elastic Syringe.—A syringe is an indispensable article of household furniture. There are few

diseases that do not require its use. It is important, therefore, to have as perfect an instrument in every family as can be devised. The syringe of Dr. Mattson has received the endorsement of many of the leading physicians of the different cities. It is described by the inventor as follows:—

"The contraction and expansion of the bulb produce a vacuum, which causes the syringe to fill with fluid through atmospheric pressure. The new method of fastening the metallic couplings to the bulb renders leakage impossible, and is therefore a desirable improvement upon the old mode of fastening, which is so frequently attended with leakage. The new arrangement of the inlet and outlet tubes renders the syringe one of the most convenient ever introduced, for it can be used with the greatest ease and comfort in any position of the body. The angle of the outlet tube facilitates this use, because the syringe thereby adapts itself to the position of the hand, rather than the hand being required to adapt itself to the syringe."

Correspondence.

SPECIFIC RELATIONS OF DRUGS.

[To the Editor of the American Medical Times.]

Sir:—I noticed the following "correction" recently in the columns of the *N. Y. Tribune*:—

To the Editor of the N. Y. Tribune.

Sir: In your notice of the Commencement of the Homœopathic Medical College of New York on the 3d inst., I find an error in the report of Prof. Guernsey's address to the graduating class, in the following sentence: "*The practitioner might adopt or use any system that should have the effect of curing his patient.*"

Prof. Guernsey desires me to say that the reporter misapprehended his remarks in this particular, as he believes and teaches but one law of cure—and that law is the specific relation of a drug to an organ or function of the human body.

J. Beakley, Dean of the Faculty.

We are thus given to understand that homœopathic graduates, in the opinion of their teachers, are not at liberty to cure their patients except by the "one law of cure," viz. "*the specific relation of a drug to an organ or function of the human body!*"—at least so says Prof. Guernsey through Dr. J. Beakley, "Dean of the Faculty."

What new phase will this system next assume? Here is a candid acknowledgment that its supporters would prefer to have their patients die than be cured on any other principle or plan than the homœopathic, or what is so considered. If this is not "zeal without knowledge," it is certainly zeal without humanity. But it illustrates the bigotry of narrow minds, through blind attachment to an unfounded and ridiculous hypothesis.

But Prof. Guernsey himself seems not to understand the homœopathic law, which is not "the specific relations of drugs to certain organs," a doctrine taught in all works on materia medica and recognised constantly by all practitioners, but, according to Hahnemann, by giving "*medicines which possess the faculty of creating symptoms similar to those of the disease itself, but which are more of an intense nature*"—(Organon, Am. Transl., p. 90). In other words, by *producing similar artificial diseases.* This is a very different thing from "the specific relations of drugs to certain organs." Expectorants have a specific relation to the lungs, cholagogues to the liver, diuretics to the kidneys, diaphoretics to the skin, emmenagogues to the uterine system, narcotics to the brain, etc., and prove curative in consequence of such specific action. Who but homœopathists ever supposed that curative effects of drugs were owing to their *causing artificial diseases?* This doctrine, as every one knows, lies at the foundation of the whole homœopathic system; and yet there is not a single fact or observation which sustains it! No wonder its professed teachers are so rapidly abandoning it! The time is near when not a vestige of the system will remain, and "none so poor to do it reverence."

In conclusion, and in opposition to Prof. Guernsey, I will quote Hahnemann's first rule (Organon, p. 79). The first and sole duty of the physician is "*to restore health to the sick.*" His second rule is no less orthodox: "*The perfection of a cure consists in restoring health in a prompt, mild, and permanent manner.*" When homœopathic practitioners acknowledge and practise according to these rules, they will no longer be classed by the true scientific medical world as the adherents and advocates of quackery, but as belonging to the school of rational, legitimate medicine.

Crito.

UNJUST ATTACK ON AN ARMY SURGEON.

[To the Editor of the American Medical Times.]

Sir:—In looking over the Medical Times just received, I was pained to read a most ridiculous note from some one in Philadelphia to an English Surgeon, on Surgeon J. R. Smith. Having long been acquainted with Dr. Smith, I am prepared to deny every assertion made. Dr. Smith may have his enemies, as we all have, but cannot rest their enmity upon any real injury received from him. His position in the Surgeon-General's office was such as would necessarily create ill feelings on the part of individuals towards him. But he was never swerved from his duty by fear or favor.

He was loyal to the Medical Department, and jealously strove to promote its honor and character. He was closely associated with the Surgeon-General, and powerfully supported him in the trying scenes through which this overtasked Bureau had to pass. Dr. Smith is destined to take a high rank in the Medical Staff as a most efficient executive officer.

Yours, etc.,

Surg. Vol.

Dep't of the Gulf.

MEDICAL MATTERS IN VICKSBURG.

[To the Editor of the American Medical Times.]

Sir:—The medical affairs of the Gibraltar of the Mississippi, held by the Union forces since the 4th of July last, may perhaps possess some interest for the profession at large, as well as the medical department of the army.

At the time of the first occupation of the city by General Grant, the Medical Director of the Department of the Tennessee was Surgeon Madison Mills, U.S.A., who was soon succeeded by Surgeon John Moore, U.S.V. This gentleman continues still in the office, and lately made a tour of inspection of the hospitals of Vicksburg. I freely bear testimony to the efficiency and courtesy of Dr. M., during my term of service in that department. Through the politeness of my friend and pupil, Thomas C. Coxe, Medical Cadet, I am enabled to present a few facts in relation to the hospitals there.

He says:—"Hospital No. 2 has two hundred and fifty-three patients, under charge of Surgeon Hill, 20th Ohio Vols.; the 'Marine,' under charge of Surgeon Kemble, U.S.V., has two hundred and seventeen patients. The Marine is now more generally known as 'No. 3.' The McPherson Hospital, under charge of Surgeon E. Powell, 72d Ill. Vols., has one hundred and thirty. These are all the General Hospitals now in the place. . . . They all draw full, or nearly so, ordinary rations, while for the lighter articles of diet for the sick, they depend almost entirely upon the 'Sanitary Commission,' whose agency here is well supplied with everything needful, which they issue liberally." Fresh fish and some few vegetables and fruits can be obtained from the market.

Vicksburg, it is well known, is situated in a district of country where fruits, such as peaches, apples, plums, cherries, etc., are easily cultivated. Melons, cabbages, tomatoes, potatoes, and other products of the garden were plentiful before the breaking out of the rebellion. The grounds around the city at present, however, are necessa-

rily but little cultivated, and the belligerent forces destroy what is produced. The Sanitary Commission do a good work in supplying this deficiency from the rich fields of the West. The onion patches of Wisconsin, the potato fields of Indiana and Illinois, contribute largely, through the Commission. Here I must express my opinion on the value of the preparation called desiccated vegetables, so common in the army (an Eastern production, I believe). They are, in my estimation, when *properly cooked*, a most excellent substitute for the fresh article.

"Surgeon J. H. Boucher, U.S.V., is the Medical Director of the Corps (17th, McPherson's); but being temporarily absent with the expedition, Asst. Surg. C. D. Davis, 17th Wisconsin Vols., acts in his place. Brig. Gen. McArthur is Commander of the post.

"Asst. Surgeon Ridgely, U.S.A., has turned over the Purveyor's office to Dr. Morrison."

The health of the city itself has been attended to by Surgeon Churchman, U.S.V., who was appointed to the position of "Health Officer" shortly after the surrender. The chaos of unhealthiness, in which Dr. C. found the city, was soon reduced to order and cleanliness. The sick and dying negroes were removed to hospitals outside of the town; the dead mules and other animals were buried or thrown into the river; the streets, lanes, alleys, cellars, and garrets were carefully and vigorously policed, and due attention was paid to the health of the citizens in every respect. A very few of the physicians remained and practised their profession as before. Dr. C. is energetic and efficient, and performs his duties conscientiously. He is one of the few who had left the slave States (Virginia) before the war, from feelings of repugnance to the "peculiar institution."

Dr. Powell is well known throughout the country as a contributor to a medical journal in Chicago, and as a teacher, formerly, in the "Rush Medical College" of that city. My impressions, from the intercourse I had with all these gentlemen, are pleasant and lasting; and I shall long remember the laborious and exhausting service which we performed together, before, during, and after the siege. Long live our faithful comrades of Vicksburg——and let me ask in conclusion, why have not some of them been promoted to higher stations, with the Generals and other military officers?

Yours, etc.,
JAMES BRYAN, *Surgeon U.S. Vols.*

141 MONTAGUE STREET, BROOKLYN.
Feb. 27, 1864.

ADVERTISING BY SPECIALISTS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In the "London Lancet," for March 12th, I find the following editorial on the subject of "*Advertising Specialties*," which seems at this time to be exceedingly opportune. "The question of 'Specialties' has nearly found its level in this country, and has been settled, by admitting them in the bosom of hospitals and centres of instruction, where they can serve purposes of education and progress, within salutary limits, and subject to the regulations of the general body. Left to themselves, they grow rank, and overrun the place in lawless outgrowths. In America, the professors of specialties have adopted the fashion of advertising. There we read, that "Dr. ——, Lecturer in —— College, devotes his time to the treatment of diseases of —— and neighbouring organs; office hours — to —," which announcement, with others similar to it, appears in large capitals in the advertising columns of the principal weekly periodicals of America. Here, in Great Britain, there could not be any difference of opinion about the exceedingly gross impropriety of such a proceeding, however various standards rule in different countries; and possibly the American profession may find as much reason to wonder at irregularities that we tolerate, as we do at the lax procedures which their professional code admits." The editor then proceeds to comment upon the resolutions recently adopted by the New York County Medical and the State Society on this subject, which resolutions he publishes at length. He concludes in this wise: "Thus, the specialists receive a check; but the admission is made that advertisements, indicating *location* and *residence*, are consistent with professional dignity; a proposition which it seems to be difficult to maintain, and which would be assuredly rejected with unanimity by any English society. So far as the resolutions go, they are of good effect; but we could desire, in the common interest of *professional dignity*, that they should go farther."

"MENS CONSCIA RECTI."

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Surgeon J. S. Bobbs, U.S.V., now on duty at Indianapolis, Ind., will report by letter to the Provost Marshal-General, U.S.A., for duty as a member of a Board to be convened in that city, for the examination of applicants for commissions and commissioned Officers already in the Invalid Corps.

Surgeon R. H. Gilbert, U.S.V., is relieved from duty in the Department of the Susquehanna, and will report in person without delay to the Commanding General, Army of the Cumberland, for assignment to duty.

Surgeon David J. McKibbin, U.S.V., is relieved from duty in the Army of the Cumberland, and will report in person without delay to the Commanding General, Department of the Susquehanna, for assignment to duty.

Assistant-Surgeon James Uglow, 43d New York Vols., is honorably discharged the service of the United States, to date January 30, 1864, he having accepted an appointment as Surgeon 26th U. S. Colored Troops.

Surgeon Alexander J. Mullen, 35th Indiana Vols., having tendered his resignation, is honorably discharged the service of the United States, with condition that he shall receive no final payments until he has satisfied the Pay Department that he is not indebted to the Government.

The Board of Examination convened at Convalescent Camp, near Alexandria, Va., by virtue of Special Orders No. 7, from the War Department, current series, having concluded the duties for which it was organized, is dissolved, and the Officers named therein will report to the Provost-Marshal-General for instructions.

Surgeon Clayton A. Cawgill, U.S.V., has been assigned to, and is performing the duties of Acting Medical Inspector, District of North Carolina.

In addition to his duties as Attending Surgeon, Battery E, 2d U. S. Artillery, Assistant-Surgeon F. Freeman, U.S.V., has been assigned to the Franklin House Hospital, Knoxville, Tenn.

Surgeon J. B. Morrison, U.S.V., is on twenty days' leave in Lancaster Co., Penn.

Surgeon J. W. Lawton, U.S.V., has been assigned to duty in charge of Convalescent Camp, Nashville, Tenn., General Hospital No. 12, of which he was lately in charge, having been closed.

Surgeon C. N. Chamberlain, U.S.V., having reported for duty to the Commanding General, 1st Army Corps (Army of the Potomac), has been designated by him as Medical Inspector of that Corps.

Surgeon S. S. Mulford, U.S.V., has returned from leave, and resumed his duties on Folly Island, S. C., as Chief Medical Officer, Division commanded by Brigadier-General Gordon.

The leave of absence heretofore granted to Surgeon Murray Weidman, 2d Pennsylvania Cavalry, is extended ten days.

The resignation of Surgeon John T. Hodgen, U.S.V., has been accepted by the President, to take effect February 23, 1864.

So much of Special Orders No. 43, current series, from the War Department, as dismissed Surgeon J. R. Leal, 44th New York Vols., has been revoked, and he is restored to his command, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

Surgeon D. G. Brinton, U.S.V., is relieved from duty in the Army of the Cumberland, and will report in person without delay to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty in the Northern Department.

By direction of the President, Hospital Chaplain Thomas T. Devan, U.S.A., having been rendered supernumerary by the breaking up of the General Hospital at Fort Schuyler, N. Y., is honorably discharged the service of the United States, to date February 23, 1864.

Surgeon James Bryan, U.S.V., now waiting orders at Brooklyn, N. Y., will report in person without delay to Major-General Butler, U.S. Vols., Commanding Department of Virginia and North Carolina for assignment to duty.

Dr. Frank S. Dow, Private, Battery A, 1st Vermont Vols., and Dr. R. S. Halleck, of St. Louis, Mo., have been assigned Assist.-Surgeons in the U.S. Colored Troops.

Thomas H. Booz, of Maryland, R. H. Spencer, of New York, Charles Wachter, of Maryland, John Davis, of Massachusetts, W. C. Myers, of Pennsylvania, J. M. Aldrich, of Illinois, J. A. Seaton, of Illinois, J. M. Murray, of Missouri, W. H. Heistand, of Pennsylvania, James B. Newlin and Charles Constantine, of Massachusetts, and Alberto Marochetti, of Washington, D.C., have been appointed Hospital Stewards in the U.S.A.

Assistant-Surgeon Samuel Hart, U.S.V., has been placed in charge of General Hospital No. 4, Murfreesboro, Tenn.

Surgeon S. B. Davis, U.S.A., has reported to Major-General Curtis, U.S.V., at Fort Leavenworth, Kansas.

TO CORRESPONDENTS.

☞ DR. PERCY replies to our remarks on "Medical Oratory," intimating that he is the person alluded to, and calling for a statement of the circumstances in full, and the name. It did not accord with our purpose to mention names in that connexion, but we would say that, if DR. PERCY has been guilty of the improprieties alluded to, he can readily explain the circumstances.

Communications have been received from Dr. Risch, Milwaukie, Wisc., Dr. G. P. Hachenberg, Nashville, Tenn.; Dr. Amos Sawyer, Hillsboro, Ill.; Dr. J. F. Miner, Editor Buff. Med. and Surg. Journal.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 20th day of March to the 27th day of March, 1864.

Deaths.—Men, 182; women, 118; boys, 126; girls, 114. Total, 485. Adults, 245; children, 240. Of native parents, 51; foreign, 185; not stated, 4; males, 258; females, 227; colored persons, 17. Infants under two years of age, 186.

Among the causes of death we notice:—Erysipelas, 8; albuminuria, 10; apoplexy, 9; infantile convulsions, 22; croup, 20; diphtherite, 13; scarlet fever, 17; puerperal fever, 2; typhus and typhoid fevers, 24; consumption, 73; small-pox, 5; measles, 2; dropsy in head, 28; infantile marasmus, 24; whooping-cough, 5; inflammation of brain, 15; of bowels, 18; of lungs, 47; bronchitis, 13; diarrhœa and dysentery, 9. 249 deaths occurred from acute diseases, and 28 from violent causes. 292 were native, and 157 foreign; of whom 105 came from Ireland; 62 died in the City Charities; of whom 10 were in Bellevue Hospital, and 11 died in the Immigrant Institution.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

March 1864.	SIX A.M.				TWO P.M.				TEN P.M.			
	Minim. Temp'ture	Temperature	Evaporation Below.	Barometer.	Wind.	Temperature	Evap. Below.	Barometer.	Wind.	Temperature	Evap. Below.	Barometer.	Wind.
	°	°				°				°			
22d.	14	15	3½	30.10	N.W.	32	5	30.11	W.	20	4	29.98	N.W.
23d.	14	15	2	29.84	N.E.	27	4	29.81	N.W.	26	3	29.80	N.W.
24th.	26	28	4	29.83	N.W.	47	6	29.90	N.W.	40	3½	29.91	N.W.
25th.	36	40	3	29.92	S.W.	51	5	29.95	S.E.	38	3	29.81	N.E.
26th.	33	34	½	29.61	N.E.	38	1	29.64	N.E.	35	1	29.71	N.E.
27th.	30	31	3	29.90	N.W.	47	5	29.94	N.	39	4	29.95	N.
28th.	32	33	3½	29.97	N.W.	46	5	29.99	N.	41	4	29.99	N.

REMARKS.—22d, Clear A.M.; cloudy P.M., with high wind. 23d, Snow-storm A.M.; cloudy P.M.; wind fresh. 24th, Mostly clear, with fresh wind. 25th, Fog, early; cloudy day. 26th, Rain-storm. 27th and 28th, Mostly clear, with fresh winds.

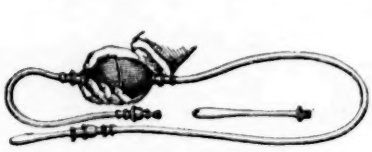
MATTSON'S NEW IMPROVEMENT IN SYRINGES.

PATENTED, NOVEMBER 19, 1861.

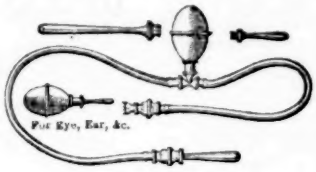
MADE OF THE BEST WHITE RUBBER AND METAL.

SUITED TO MALES, FEMALES, AND INFANTS.

☞ The great objection to *Elastic Syringes* is the LEAKAGE OF THE BULB NECKS, whereby the instruments are rendered inconvenient or useless; but this defect has been completely obviated by MATTSON'S NEW PATENT BULB FASTENING. While the Syringe Bulbs in common use have to be exchanged by hundreds and thousands on account of LEAKAGE, not one in *Twenty Thousand* of MATTSON'S Improvement has yet been returned for such a reason.



Mattson's Elastic Syringe, No. 1.



Mattson's Combination Syringe, No. 3.

Mattson's Elastic Syringe, No. 2.

EACH SYRINGE HAS THE PATENT BULB FASTENING.

MATTSON'S NO. 1 (as seen in the above cut), is our best Syringe. It can be used with ease and comfort in any position of the body, because the elbow form of the outlet tube adapts the instrument to any and every position of the hand. Ladies who have used various other Syringes, have given to this a decided preference. A new "**FAMILY GUIDE**" is contained in the box of each Syringe, and embodies much useful information, which will save physicians the trouble of giving minute directions to their patients respecting the use of injections. The box is strong and handsomely embossed.

MATTSON'S NO. 2 has a different arrangement of the rubber tubes (inlet and outlet), as may be seen by the cut above, which some prefer but no one who has fully tested the No. 1. The **FAMILY GUIDE** is not included with this Syringe. The box is neat and strong.

MATTSON'S NO. 3 will be understood by reference to the central cut above. It has **FOUR INJECTING TUBES**, one of which is adapted to the eye, ear, etc. **FAMILY GUIDE** not included. The box strong and handsome.

THE ABOVE SYRINGES are now the best and most attractive in the market, and sell readily as soon as they find their way upon the counters of the Druggists.

FOUR SILVER MEDALS have been awarded to Mattson's Elastic Syringe, viz. :—one in Boston, one in Lowell, Mass., one in Baltimore, and one in Washington City. This is the only Syringe that has ever received the high compliment of a Silver Medal.

The **FIRST PREMIUM** of the American Institute was awarded to Mattson's Elastic Syringes, at its recent Fair in New York City, September, 1863.

☞ Mattson's Elastic Pump Syringes were the first ever introduced into the United States, and in their present improved forms are selling as rapidly as they can be manufactured.

MATTSON SYRINGE COMPANY, New York City, Manufacturers.

HAGERTY BROTHERS, 8 & 10 Platt Street, New York City,

GENERAL AGENTS.

☞ INFRINGEMENTS OF THE ABOVE PATENT WILL BE PROSECUTED.

HAGERTY BROTHERS,

NOS. 8 & 10 PLATT ST., NEW YORK,

MANUFACTURERS, IMPORTERS OF AND WHOLESALE DEALERS IN

DRUGGISTS', PERFUMERS', CONFECTIONERS' AND LIQUOR DEALERS'

GLASS WARE,

RUBBER GOODS, PORCELAIN WARE & SUNDRIES.

Chemical and Philosophical Ware,

IN STOCK AND MANUFACTURED OR IMPORTED TO ORDER.

Apothecaries' Stores Labelled throughout in the best manner, and furnished with everything necessary for business.

PRIVATE MOULDS MADE TO ORDER AND PARTICULARLY ATTENDED TO.